Undergraduate Catalog of Courses

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3+2 Engineering

Saint Mary's College of California

3+2 ENGINEERING PROGRAM

Through the 3+2 Engineering Program, Saint Mary's offers students the benefits of a liberal arts education while allowing them to pursue an engineering degree. Students spend their first three years at Saint Mary's taking physical science, mathematics, humanities and social science courses. The final two years are completed at an engineering school approved by the program's director. Upon completion of all academic requirements students are granted two degrees: a bachelor of arts from Saint Mary's College and a bachelor of science in engineering from the university they have chosen for completing the final two years of the program. The full range of engineering specializations can be studied, Computer Science, Electrical Engineering, Biomedical Engineering, Aeronautical Engineering, Chemical Engineering, and Mechanical Engineering. Saint Mary's has a transfer agreement with Washington University in St. Louis which guarantees admission to our students who have a grade point average of at least 3.25.

FACULTY

Chris Ray, Ph.D., *Director; Professor of Physics and Astronomy*

LEARNING OUTCOMES

After completing the Engineering Program at Saint Mary's, students will have a working knowledge of the physical world and mathematics and a developed ability to reason and communicate. These gains will allow the students to succeed in the specialized engineering courses taken after transferring and to work effectively as an engineer upon graduation.

REQUIREMENTS

Students must satisfy the following requirements: The completion of 27 transferable course credits with a minimum of 18 completed at Saint Mary's; the majority of the Core Curriculum requirements of Saint Mary's College as follows:

Habits of Mind:
Collegiate Seminar Courses: 3 courses including **CS 1, 2,** and **103**
Writing Courses: 3 courses including **English 4, 5,** and an upper division WID course

Pathways to Knowledge:
Mathematical Understanding: 1 course
Theological Understanding: 1 course, Christian Foundations
Social, Historical, and Cultural Understanding: 2 courses
Artistic Understanding: 2 courses

Engaging the World:
3 courses from across the areas Common Good, American Diversity, Global Perspectives, and Community Engagement

Completion of the following courses:
Mathematics 27, 38, 39, 134
Physics 1, 2 (lab), 3, 4 (lab), 102
Chemistry 8, 9 (lab)
Physics 60 or **Chemistry 10, 11 (lab)**
Math/Science electives (5 courses)

Other courses may be required or recommended for entrance into particular engineering majors. The student must consult with the 3+2 Engineering Program director regarding his/her course of study.